

NASA/GSFC		MISSION OPERATIONS & DATA SYSTEMS DIRECTORATE (MO&DSD) CONFIGURATION CHANGE REQUEST (CCR)																																																																					
1. CCR NO.	CCR-530-WSC-04	2. DATE 8 November 1996	3. PRIORITY <input type="checkbox"/> EMERGENCY <input type="checkbox"/> URGENT <input checked="" type="checkbox"/> ROUTINE	4. CHANGE LEVEL <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F																																																																			
5. TITLE OF CHANGE DIS Customer Unique Processing Equipment																																																																							
6. DOCUMENT TITLE Requirements Specification for the White Sands Complex (WSC) 1 September 1996 DOCUMENT NO. 530-RSD-WSC LIST ALL AFFECTED DOCUMENTS INCLUDING PROCEDURES NONE 4/2/97																																																																							
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the JSC TBC. The TDF will perform format checking on TDMs input to it. The TDMs output from the TDF shall be routed to the Black Data Switch. Local Interface (LI) TDMs shall be routed via the LI TBC to the Local Interface Panel and nowhere else. LI TDMs shall not pass through the GSFC or JSC TBC/TDF or Black Data Switch.

All TDMs shall be in the 4800-bit blocked format specified in 530-ICD-NCC-FDF/WSC. In the Black Data Switch, all TDMs destined for GSFC and JSC shall be routed to the Communications Switch. In the Communications Switch, GSFC and JSC TDMs shall be processed (with link control information) and multiplexed with other return data for transmission via the Common Carrier Interfaces

TBC and TDF data interfaces shall be designed to allow manual bypassing of the respective chassis without performance degradation. A control and monitoring interface between the DIS ADPE Subsystem and either the TBC or TDF is not required. The TBCs and TDFs shall operate in local control mode and shall be monitored and controlled from their respective front panels. TDF interface types are contained in 532-FPR-TDF, Functional and Performance Requirements for the Tracking Data Formatter.

8.1.5.8 Black OPS Processing (Danzante Ground Terminal Only)

Black OPS shall be routed by the Black Data Switch between the SMTF ADPE (via the SMTF BED) and the Communications Switch for transmission to and reception from CC interfaces when the SMTF ADPE is running in the Black mode. The Black OPS format shall be formatted as 4800-bit blocked data as specified in 530-ICD-NCC-FDF/WSC. The DIS equipment setup for processing of Black SMTF OPS shall be via operator control.

8.1.5.9 Customer Unique Equipment

Normal customer data is processed to baseband and provided to the customer by the permanently installed Data Interface Subsystem (DIS) hardware. This hardware is automated and configured by Schedule Orders (SHOs) sent by NCC.

The Ground Terminal design shall include the capability to interface unique customer processing equipment. Customer unique equipment shall not require commanding or statusing by the Ground Terminal ADPE.

The implementation for special customer unique processing capabilities shall be developed on a case by case basis by representatives from NASA, WSC, and customer personnel. The result of this coordination shall be documented in an approved Interface Control Document (ICD).

8.1.6 Data Link Monitoring (DLM)

The DLM Subsystem shall monitor the outgoing composite multiplexed data signal (10 Mbps each) to the CC interface and the incoming composite data signals (10 Mbps each) from the CC interfaces. The DLM subsystem shall also monitor the outgoing composite multiplexed data streams entering the cross-strapping multiplexers, the multiplexed data being sent to the recorders, the outputs of the HDR multiplexers, the inputs (50 Mbps) to the HDR demultiplexers from inter-terminal interface, and the high data rate (50 Mbps) data streams to the inter-terminal interface and the Common Carrier interface. The DLM subsystem, in conjunction with the DIS ADPE subsystem, shall support the selection of prime/redundant equipment in the DIS and the

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